APPENDIX

GLOSSARY

Action plan: A plan for the implementation of the countermeasure(s) showing who takes what actions, when they take them, where they take them, and how often they are taken.

Advocacy: Promotion of an issue among policymakers and program planners.

Age at death: Age at time of death of fetus or neonate.

Antenatal care: Health care provided to the pregnant woman, within a clinic or outreach service context.

Assessment of gestational age of baby: The gestational age of a baby can be assessed by use of:

- the last menstrual period, which will be less accurate in societies where prolonged lactational amenorrhea is common or where calendars are not used.
- ultrasound assessment inutero (the gold standard but unavailable in most developing countries).
- clinical assessment of gestation after delivery, using a variety or scores. The well-validated scores are fairly complex and require skill. Simpler scores are available and give moderately accurate assessments.

Assessment of size of baby: The size of a baby can be assessed through foot sole size, tape measurement of chest, head, or arm, spring scales, and balance scales.

Attributable risk: Amount that a risk factor is responsible (attributable) for causing an outcome. The magnitude of the attributable risk percentage of a condition is related to both the severity of the condition and how frequently it occurs.

BABIES (birth weight and age-at-death boxes for an information and evaluation system): An adaptable assessment tool that allows the program manger to collect, organize, analyze, and translate data into information for newborn health interventions. It uses two pieces of date: age-at-death of the fetus/newborn and birth weight group.

Basic Emergency Obstetric care (BEmOC): The ability of a health institution to perform manual removal of retained placental/pieces; assisted vaginal delivery (i.e., vacuum extraction), as well as the ability to administer antibiotics, sedatives (Valium, Magnesium Sulfate) and oxytocics (Ergometrine, Pitocin) IM or IV and IV fluids. It is recommended that there should be four basic EmOC facilities per 500,000 people.

Behavioral change: Characterized as proceeding through four stages – pre-contemplation, contemplation, action, and maintenance of a behavior – usually towards a healthy behavior.

Birth planning: A process that empowers pregnant women, families, and communities to prepare for safe delivery and for motherhood including emergency preparedness.

Birth weight: Weight of baby within 48 hours of birth (ideally taken as soon after birth as possible).

Birth weight group: Category of birth weight; may be divided into categories (i.e., less than 1.499 kg, 1.5 kg to 2.5 kg, greater than or equal to 2.5 kg) or may be assessed in terms of small and normal.

Budget: Planned allocation of funds in a specified period.

Capacity: The ability to fulfill a given role in a given setting; the term may be applied to individuals but is more commonly applied to institutions or organizations. Capacity may apply to a variety of roles (i.e., technical, logistical).

Capacity-building: Increasing the ability of a local institution to provide high-quality services appropriate to the local setting; involves performance assessment and targeted strategies to improve staff competency, supply logistics, and other determinants of quality of care.

Care during delivery: This is the time from the onset of labor until the completion of the third stage of labor. Interventions may include skilled birth attendant, high-quality emergency obstetric care, and basic resuscitation.

Care during pregnancy: Care throughout pregnancy until the onset of labor , including care both at home and in the formal health care system, such as in an antenatal clinic

Count-Divide-Compare: A cycle of activities in applied epidemiology: that 1) counts events; 2) uses division to form ratios, proportions, and rates; and 3) uses ratios, proportions, and rates to compare populations in time, place, and person. The purpose is to promote action to solve a health problem.

Community empowerment: A process whereby communities assume more control for their own well-being, including health practices and services.

Competency-based training: Training of staff to the level at which they are fully skilled in the implementation of a certain practice, such as neonatal resuscitation.

Comprehensive Emergency Obstetric Care (CEmOC): The ability of a health instituion to perform all the Basic EmOCs functions as well as, the ability to perform surgery under general anesthesia, retained placental pieces, and provide blood replacement. It is recommended that there should be one Comprehensive EmOC facilities per 500,000 people.

Consensus: An agreement to support a decision arrived at by the team; it implies a willingness to support the action taken by the team.

Core services: The essential services in any setting for each time period (pre-pregnancy, during pregnancy, during delivery, postpartum/newborn). Shown at the center of the web. (Figure 4.4.)

Countermeasure: A proposed solution to the problem.

Countermeasure matrix: A matrix of factors to help team members show the relationship among the problem statement, root causes, countermeasures, and practical methods to overcome the problem.

Denominator: The population at risk in the calculation of a rate or ratio; the lower portion of a fraction.

Effectiveness: The ability to undertake the "right interventions" to produce a desired result.

Efficiency: The ability to do interventions in the “night way,” resulting in high-quality services.

Emergency newborn care: Identification, stabilization, and management of babies with conditions such as neonatal sepsis, asphyxia, and jaundice.

Emergency obstetric care (EmOC): Interventions to appropriately manage obstetrical complications. This includes surgical obstetrics (C-sections, treatment of lacerations, laparotomy), anesthesia, medical treatment of shock, eclampsia and anemia, blood replacement, manual procedures, and assisted delivery.

Emergency preparedness: An approach to promote early recognition of complications for mother and baby at any time during pregnancy, delivery, or after delivery and to maximize the likelihood of timely referral and management. This involves preparedness in the community and in the formal health care system.

Epidemiology: The study of the distribution and determinants of health-related states and events in populations and the application of this study to control health problems.

Essential newborn care: Basic preventive care for all newborns, especially warmth, cleanliness, breastfeeding, cord and eye care, and immunizations.

Evaluation: Comparison of an outcome indicator to a preset objective; measures the result of the interventions on the health of the population (i.e., neonatal mortality rate) according to the objectives set previously.

Extra newborn care: Identification of and additional support for babies who are born weighing less than 2,499 grams. Mortality rates for babies with birth weights between 1,750-2,500 grams can be improved significantly with simple interventions. Babies weighing less than or equal to 1,750 grams at birth are likely to require more specialized care.

Fetal-infant mortality rate =

$$\frac{\text{Late fetal deaths + infant (first year) deaths}}{\text{total births}}$$

Fishbone diagram: A graphic composed of lines and words to represent a meaningful relationship between an effect and its causes; used to identify a cause upon which the team can take action.

Gestational age: Number of completed weeks of pregnancy since the last menstrual period of the mother. Gestational age can also be assessed by examining the physical characteristics of the baby.

Goal: A generally broad statement that guides the overall vision for a program.

Health care delivery system (HCDS): A system that includes all people who provide and receive health care services (i.e., communities, local providers, health institutions, and the intersectoral system).

Health management information system (HMIS): An adaptable system that collects, analyzes, and responds to data about the occurrence and distribution of health outcomes for a population within a given geographical location. It also links these outcomes with other relevant data, which are translated into information to manage the activities that improve health outcomes.

Impact: Effect on population to reduce the undesirable outcome (i.e., death).

Incidence: The number of new cases of an illness or a person being ill in a given time period.

Incidence rate: The rate at which new events occur in the population. The number of new events (i.e., new cases of a specified disease diagnosed or reported during a defined period of time) is the numerator, and the number of persons in the stated population in which the cases occurred is the denominator.

Indicator: A measure that provides information about health outcomes, status, or health service processes.

Infant morality rate (IMR):

$$\frac{\text{Deaths of infants under one year of age}}{\text{1,000 live births}}$$

Infant mortality rate, weight-specific =

$$\frac{\text{Infant deaths in a specific weight group x 1,000}}{\text{live births in the same weight group}}$$

Intermediate LBW: Birth weight of 1,500-2,499 grams.

Intervention Package: A group of evidence-based interventions that are combined to apply to the same time period individually of proven effectiveness in reducing fetal-neonatal mortality and are combines as they apply to the same period (i.e., care during pregnancy) or the same problem (i.e., neonatal tetanus). The Intervention Packages are not just for the formal health sector but for all the sectors of the HCDS.

Intrauterine growth restriction (IUGR): IUGR is restricted growth of the fetus throughout the pregnancy resulting in a baby who weighs less than expected for their gestional age.

Late fetal death: Babies born dead between 28-40 weeks.

Live birth: A baby born with any sign of life regardless of weight or gestation.

Low birth weight (LBW): Birth weight less than 2,500 g.

Management: A process by which one plans, implements, and evaluates an organized response to a health problem.

Maternal mortality rate =

$$\frac{\text{Number of women who die during pregnancy or within 42 days postpartum}}{\text{100,000 women of reproductive age}}$$

Maternal mortality ratio (MMR) =

$$\frac{\text{Number of women who die during pregnancy or within 42 days postpartum}}{\text{100,000 live births}}$$

Monitoring: An ongoing system of data collection and tracking that provides a program manager with information to make management decisions.

Neonatal death: A baby born alive who dies before the 28th day of life.

Neonatal mortality rate (NMR) =

$$\frac{\text{Number of neonatal deaths}}{\text{1,000 live births}}$$

Neonatal period: The first 28 days of life; divided into early neonatal period (first 7 days) and late neonatal period (days 8-28).

Newborn: Baby from birth until 28 completed days of life.

Newborn (neonatal) care: Care from birth until the 28th completed day of life, including care both at home and in the formal health care system. Can be divided into essential, extra and emergency.

Numerator: The absolute number of events; the upper portion of a fraction.

Objectives: Statements about the expected short-term results (3-5 years) of an intervention; objectives should contribute to the overall goal and be specific, measurable, achievable, realistic, and time-bound.

Odds ratio: Ratio of exposure among cases and exposure among controls.

Opportunity Gap: Health indicators in standard population and those in the local population.

Outcome indicator: A measure that provides information about a change in a significant result that reflects health status.

Partograph: A written record charting the progress of labor and delivery and showing the key observations to monitor the women and the fetus, such as pulse, blood pressure, fetal heart rate, etc.

Performance assessment: A process that enables the program manager and stakeholders to assess the effectiveness and quality of interventions.

Perinatal mortality rate (PMR) =

$$\frac{\text{Numbers of fetal deaths after 22 weeks gestation + early neonatal deaths}}{\text{1,000 live births (live births + late fetal deaths)}}$$

Perinatal period: From 22 completed weeks of gestation to 7 completed days after birth.

Personnel plan: A plan that states who is involved in implementing and supporting the interventions.

Policy change: Modification of accepted procedures at any level on which policy is set (i.e., individual, institutional, nation, international).

Population attributable risk: A measure of the amount of disease associated with an exposure within a population.

Postpartum care (PPC): Care from the delivery until the sixth completed week after delivery, including care both at home and in the formal health care system.

Postterm birth: Birth after 42 completed weeks of gestation.

Pre-pregnancy health: The health of the woman before she becomes pregnant.

Premature rupture of membranes: Rupture of membranes before 37 weeks of gestation.

Preterm birth: Live birth before 37 completed weeks of gestation.

Prevalence: The number of instances of a given disease or other condition in a particular population at a specified time.

Prevalence rate (ratio): The total number of individuals who have an attribute or disease at a particular time (or during a particular period) divided by the population at risk of having the attribute or disease at that time or midway through the period.

Prioritization: A process in which potential interventions are reviewed to select those most effective, feasible, and acceptable.

Problem: A gap between the way something is and the way we want it to be. A health problem has to considered from both an epidemiologic and community perspective.

Process: A repetitive and systematic series of actions or operations in which resources are used to develop or deliver products or services.

Process indicator: A measure that provides information about activities that transform inputs into knowledge and training.

Program management cycle: Four-step cycle that assists program managers and key stakeholders to identify the key problems, assess performance of the HCDS, prioritize and implement appropriate interventions, monitor progress, and evaluate outcomes.

Program manager: An individual responsible for program decision-making and implementation.

Prolonged labor: Labor lasting for more than 12 hours.

Prolonged rupture of membranes: Rupture of membranes more than 18 hours before delivery.

Proportion: A type of ratio in which the numerator is included in the denominator. The important difference between a proportion and a ratio is that the numerator of a proportion is included in the population defined by the denominator, whereas this is not necessarily so for a ratio.

Quality management: A process to ensure patient or client satisfaction through involvement of all employees in reliably producing and delivering high-quality products or services.

Quality tools: A method or technique used in the quality management process to assist a team in solving a problem.

Rate: A ratio whose essential characteristics are that time (per minute, per hour, etc.) is an element of the denominator and that there is a distinct relationship between the numerator and denominator. The numerator may be a measured quantity or a counted value.

Ratio: The value obtained by dividing one quantity by another; a general term of which rate, proportion, percentage, prevalence, etc. are subsets.

Relative risk: The ratio of the risk of disease or death among those exposed to the risk compared to the risk among the unexposed; this usage is synonymous with risk ratio.

Right intervention: An intervention that can produce the desired result for a given problem in a given population.

Right way: Implementing an intervention as intended and efficiently, resulting in high-quality services.

Six cleans: 1) clean attendant's hands (washed with soap), 2) clean delivery surface, 3) clean cord-cutting instrument (i.e., razor blade), 4) clean string to tie the cord, 5) clean cloth to wrap the baby, and 6) clean cloth to wrap the mother.

Skilled attendant: Individuals with "midwifery skills (i.e., doctors, midwives, nurses) who have been trained to proficiency in the skills to manage normal deliveries, diagnose, and manage or refer complicated cases." Although trained traditional birth attendants are not included, this does not mean that they cannot play a role in promoting maternal and newborn health.

Small for gestational age: SGA refers to a baby whose weight is less than the 10th percentile for gestation and gender. This term is often used as a proxy for IUGR because of the difficulty determining the "expected weight for gestation and gender." However, some babies who are SGA may not have been growth restricted but are simply inherently small and would normally be under the 10th percentile.

Spider Web Framework: A web diagram showing integrated interventions by time periods (pre-pregnancy, during pregnancy, during delivery, newborn care). Interventions within each package are listed as core (essential for all settings), additional (possible when capacity has been increased), and situational (appropriate if there is a given local problem, such as malaria or HIV). (Figure 4.4.)

Stakeholder: An individual or group that influences decision-making in the community, intersectoral, and formal sectors of the health care delivery system.

Standard population: A reference group used for comparison; appropriate standard populations may be external, national, or internal.

Standards of care: Level of acceptable service that is expected to be delivered to all clients.

Stillbirth/late fetal death: Baby born showing no sign of life who weighs more than 5 grams or is greater than 22 weeks of gestation.

Surveillance: The systematic collection and analysis of data in order to make management decisions.

Team: A high-performance task group whose members are interdependent and share common performance objectives and whose purpose is to improve the quality of products and services.

Term birth: Baby born between 37 and 42 completed weeks of gestation.

Timeline: Schedule of how often a given program will be implemented, monitored, and evaluated.

Total births: All births (live and stillborn).

Total quality management (TQM): A process that ensures patient or client satisfaction through involvement of all employees in reliably producing and delivering quality products or services.

Two-by-two table: A basic analytical structure in epidemiology and the foundation of two-dimensional thinking. It consists of two rows and two columns. Traditionally, the columns are the presence or absence of an outcome. The rows are the presence or absence of a determinant (i.e., risk factor, residence).

Variable: Any quantity that varies. Any attribute, phenomenon, or event that can have different values.

Variable, dependent: A variable whose value depends on the effect of other variables (independent variables) in the relationship under study. A manifestation or outcome whose variation we seek to explain or account for by the influences of independent variables.

Variable, independent: The characteristic being observed or measured that is hypothesized to influence an event or manifestation (the dependent variable) within the defined area of relationships under study; the independent variable is not influenced by the event or manifestation but may cause it to contribute to its variation.

Verbal autopsy: A standardized tool to determine the likely cause of death by discussion with family and community members after the death.

Very low birth weight (VLBW): Birth weight less than 1,500 grams.

APPENDIX – TABLE 1

Summary of Tables of Interventions by Strategy for each Sector

BASIC AND ADDITIONAL EQUIPMENT, SUPPLIES AND DRUGS FOR CARE OF THE NEWBORN

	EQUIPMENT	DRUGS/SUPPLIES
BASIC REQUIREMENTS FOR CORE SERVICES.	• Displayed policies for care of the normal baby, the baby requiring resuscitation and how to stabilize and refer an unwell baby. • Antenatal/delivery records/Newborn record. • Gloves. • Clean instrument to cut the cord with. • Surface available for newborn resuscitation (i.e., angled wooden shelf with overhead lights for heat). • Clock/watch with a second hand. • Suction apparatus (one or more of): – æmucus extractor" – electronic suction – foot-pump operated suction • Self-inflating ventilation bag for resuscitation: – Capacity 250-400 mls. * Pressure valve 45cm of water. * Facemasks for resuscitation: – size 1 for normal babies; – size 0 for LBW babies. • Scales to determine birth weight • Thermometer	• Dry, clean cloths to dry baby. • Baby hat and socks to maintain warmth. • Sterile tie or clamp for cord. • Suction tubes. • Disposable needles and syringes. • Cleaning fluids including bleach and chlorhexidine. • BCG vaccine. • Oral polio vaccine. • Hepatitis B vaccine. • Eye prophylaxis, tetracycline 1% ointment, or whatever is local policy. • Vitamin K injection (intramuscular) 1mg for LBW babies. • Injection Ampicillin, Gentamicin, Penicillin. • Injection Tetanus anti-toxin.
ADDITIONAL AND SITUATIONAL REQUIREMENTS (dependent on local need, capacity, and policy).	• Stethoscope (neonatal). • Low reading thermometer. • Blood sugar sticks for detecting low blood sugar. • Bilirubinometer for "bedside" measurement of bilirubin (jaundice level). • Overhead heater. • Method of avoiding hypthermia in small babies (Kangaroo care, and/or options for warmth for unwell babies requiring observation). * Sterilizer to clean containers for expressed breastmilk.	• Oxygen supply and nasogastric tubes or headbox to delivery the oxygen. • Nasogastric tubes for feeding expressed breastmilk. • 10% dextrose for intravenous use, drip giving sets, and butterflies or other means of intravenous access. • Blood giving sets, ideally with micro-dropper system. • Hypoallergic tape for fixing nasogastric tubes and IV lines. • Injection cephalosporin such as cefotaxime, depending on local policy for treatment of neonatal sepsis. • Vitamin K injection (intramuscular 2 mg for normal babies if this is local policy. • Anti-retroviral treatment for mothers and/or newborns of HIV+ mothers.

Note that this table refers to basic care and stabilization of the newborn, rather than on-going care of the sick newborn.

APPENDIX – TABLE 2

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR PRE-PREGNANCY HEALTH BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Empower community to improve status of women. • Raise female literacy rates. • Establish micro-finance schemes. • Address gender violence and FGM. • Prevent adolescent pregnancy.	• Prevent adolescent pregnancy.	• Raise female literacy rates. • Address violence against women and FGM. • Establish micro-finance schemes.
HEALTHY BEHAVIORS	• Delay age at first pregnancy. • Increase contraceptive prevalence. • Reduce discontinuation of family planning. • Address harmful practices.	• Use social marketing of family planning. • Prevent STIs and HIV, including increased condom use.	• Address smoking among teenage girls if this is a local problem.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to family planning. • Use community-based distribution of family planning.	• Improve quality of family planning services, client-centered, increased method mix, improved logistics. • Identify and treat anemia. • Identify and treat STIs. • Supportive care of HIV. • Provide tetanus toxoid immunization. • Provide rubella immunization, if appropriate.	• Strengthen transport and logistics of family planning supply systems.
SUPPORTIVE PUBLIC POLICY	• Promote good nutrition of the girl child. • Provide policy support for iodination of salt. • Strengthen adolescent pregnancy prevention policies.	• Develop and support immunization policies.	• Develop agricultural projects. • Policy of iodination of salt. • Establish micro-finance schemes. • Strengthen policy deterrents against promotion of adolescent smoking.

APPENDIX – TABLE 3

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR CARE DURING PREGNANCY BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns (i.e., transport, community funds). • Increase status of pregnant women.	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns. • Social marketing of clean delivery kits.	• Establish micro-finance schemes. • Improve transport options for emergency care for mothers and newborns.
HEALTHY BEHAVIORS	• Promote attendance at antenatal clinics. • Increase knowledge of danger signs during pregnancy. • Address harmful practices in pregnancy, i.e., "eating down." • Address violence in pregnancy.	• Provide birth planning services to pregnant women. • Consider targeted nutritional support, i.e., to women weighing <41kg during the "hungry season."	• Promote healthy diet.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to antenatal care services.	• Improve quality of antenatal care services, client-centered. • Provide tetanus toxoid immunization. • Identify and treat anemia. • Identify and treat STIs. • Presumptive treatment of malaria and hookwor. • Voluntary counseling and testing for HIV.	• Strengthen transport and logistics systems for drugs and equipment.
SUPPORTIVE PUBLIC POLICY	• Strengthen public funding and support of antenatal care services.	• Develop and support implementation of evidence-based antenatal care policies. • Implement immunization policies and support.	• Provide policy support for improved transport for emergency health care. • Strengthen systems for recording pregnancy and birth outcomes.

APPENDIX – TABLE 4

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR CARE DURING DELIVERY BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns (i.e., transport, community funds). • Increase male involvemen.t	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns. • Social marketing of clean delivery kits.	• Establish micro-finance schemes. • Improve transport options for emergency care for mothers and newborns.
HEALTHY BEHAVIORS	• Increase knowledge of danger signs during pregnancy and delivery. • Address harmful practices during delivery.	• Increase knowledge of danger signs during pregnancy and labor. • Address harmful practices during delivery.	• Increase knowledge of danger signs during pregnancy and delivery.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to skilled attendant at birth and emergency obstetric care, if required.	• Increase coverage of skilled attendant at delivery, including neonatal resuscitation skills. • Improve quality of emergency obstetric care service, client-centered. • Identify preterm labor and give antibiotics and cortico-steroids, if appropriate. • Implement strategies to reduce MTCT of HIV if appropriate.	–
SUPPORTIVE PUBLIC POLICY	• Strengthen public funding and support of antenatal care services.	• Develop and support implementation of evidence-based intrapartum care policies such as use of partograph.	• Provide policy support for improved transport for emergency health care. • Strengthen systems for recording pregnancy and birth outcomes.

APPENDIX – TABLE 5

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR ESSENTIAL NEWBORN CARE BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Increase the status of the newborn in the community. • Empower the community to carry out essential newborn care for normal babies.	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns. • Social marketing of clean delivery kits.	• Improve transport options for emergency care for mothers and newborns.
HEALTHY BEHAVIORS	• Strengthen behaviors that promote early, exclusive breastfeeding, thermo-protection. • Increase knowledge of danger signs for the newborn. • Address harmful practices that affect the newborn, such as applications to the umbilical cord.	• Strengthen behaviors that promote early, exclusive breastfeeding, thermo-protection. • Increase knowledge of danger signs for the newborn. • Address harmful practices that affect the newborn.	• Increase knowledge of danger signs for the newborn.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to skilled attendant at birth and home care of mother and newborn after delivery, if feasible.	• Increase coverage of skilled attendant at delivery, including neonatal resuscitation skills. • Provide routine immunizations to the baby and vitamin A 200,000 IU to the mother. • Implement strategies to reduce MTCT of HIV if appropriate.	
SUPPORTIVE PUBLIC POLICY	• Strengthen public funding and support of newborn care services. • Strengthen policies that promote immediate, exclusive breastfeeding and feasible alternatives for HIV-positive mothers.	• Develop and support implementation of evidence-based newborn care policies such as prophylactic eye care if high incidence of STIs. • Train and supervise staff in supporting exclusive breastfeeding.	• Provide policy support for improved transport for emergency health care. • Strengthen systems for recording pregnancy and birth outcomes.

APPENDIX – TABLE 6

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR EXTRA CARE FOR LBW BABIES BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Increase the status of the LBW newborn in the community. • Empower the community to carry out extra newborn care for stable LBW babies.	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns. • Social marketing of clean delivery kits.	• Improve transport options for emergency care for mothers and newborns.
HEALTHY BEHAVIORS	• Strengthen behaviors that promote early, exclusive breastfeeding, thermo-protection. • Increase knowledge needed by the community to identify the LBW baby and associated danger signs. • Address harmful practices that affect the LBW baby such as excess bathing resulting in hypothermia[a].	• Strengthen behaviors that promote early, exclusive breastfeeding, thermo-protection. • Increase knowledge of danger signs for the newborn. • Address harmful practices that affect the newborn.	• Increase knowledge of danger signs for the newborn.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to skilled attendant at birth and home care of mother and newborn after delivery, if feasible.	• Increase coverage and quality of skilled attendants at delivery, including neonatal resuscitation skills. • Give injection dexamethasone to women in preterm labor to reduce the risk of respiratory distress. • Train and supervise staff to provide simple extra care of the LBW baby, especially for feeding and identifying danger signs early.	–
SUPPORTIVE PUBLIC POLICY	• Strengthen public policies that promote simple extra care of LBW babies.	• Develop and support implementation of evidence-based newborn care policies such as kangaroo care for stable LBW newborns in institutions, giving vitamin K injections to LBW babies. • Strengthen routine immunization policy for LBW newborns[b].	• Provide policy support for improved transport for emergency health care. • Strengthen systems for recording pregnancy and birth outcomes including birth. weight/size surrogate and gestational age, if feasible.

[a]As noted previously. In areas of high HIV prevalence, it may be policy to wash babies immediately after delivery to reduce MTCT of HIV.
[b]Immunization should be given at the normal age as per national schedule, whatever the baby's size or gestation. Small babies need immunization even more than big babies.

APPENDIX – TABLE 7

Summary of Tables of Interventions by Strategy for each Sector

BEST PRACTICES FOR EMERGENCY NEWBORN CARE BY INTERVENTION STRATEGY

	INFORMAL HEALTH CARE SYSTEM (community)	FORMAL HEALTH CARE SYSTEM (health system and outreach services)	INTERSECTORAL SYSTEM
COMMUNITY EMPOWERMENT	• Increase the status of the ill newborn in the community and expectation for survival.	• Empower community leaders to reduce delays in access to emergency care for mothers and newborns.	• Improve transport options for emergency care for mothers and newborns.
HEALTHY BEHAVIORS	• Increase knowledge needed by the community to identify danger signs for the newborn. • Address harmful practices that cause newborn illness or delay access to care.	• Strengthen behaviors that promote early identification of illness. • Increase knowledge of danger signs for the newborn. • Address harmful practices that affect the newborn.	• Increase knowledge of danger signs for the newborn.
OPTIMAL INTERVENTIONS IMPLEMENTED BY CAPABLE INSTITUTIONS	• Increase access to skilled attendant at birth and home care of mother and newborn after delivery, if feasible. • Increase access to emergency newborn care.	• Increase coverage and quality of emergency newborn care. • Train and supervise staff to identify serious illness, stabilize the baby, and give appropriate treatment for common conditions (serious infections, asphyxia, jaundice, the bleeding baby). • Provide logistical support for supply of drugs and basic equipment.	
SUPPORTIVE PUBLIC POLICY	• Strengthen public policies that promote simple extra care of ill babies.	• Develop and support implementation of evidence-based policies such as kangaroo care for stable LBW newborns in institutions, giving vitamin K injections to LBW babies.	• Provide policy support for improved transport for emergency health care. • Strengthen systems for recording pregnancy and birth outcomes, including cause-specific mortality, if feasible.

GUIDE TO USING THE CD-ROM

HOME PAGE: This self-starting CD-ROM will open at the home page. You can use the CD-ROM in a number of ways:

- to look at the electronic version of the Healthy Newborn Manual and hyperlink to key documents with more detail;
- to read other documents, such as the CARE manual for maternal health programming;
- to use self-training materials, such as BABIES or MAPPS; and
- to print other guides, such as job aids for extra care of LBW babies.

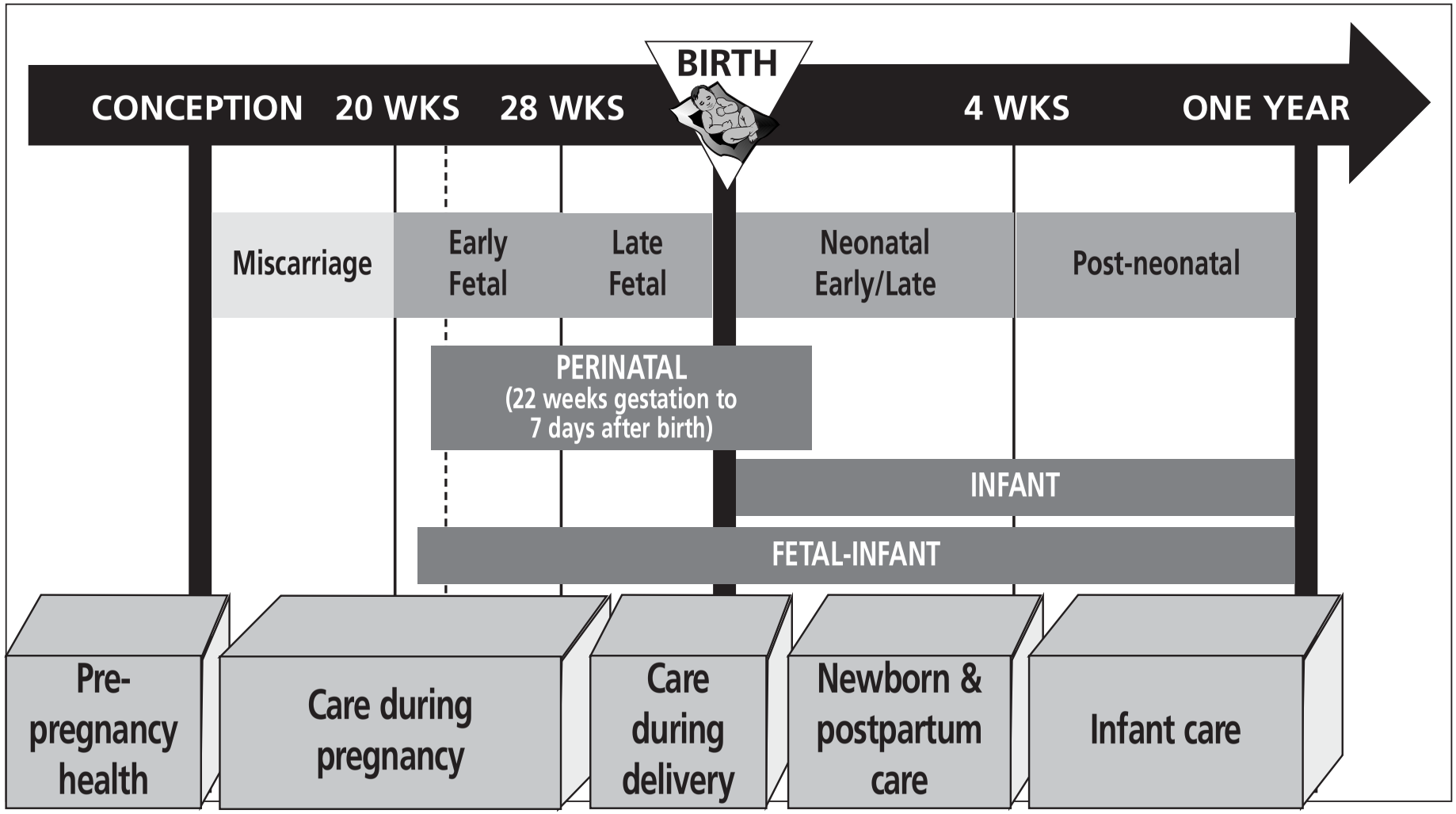
OUTLINE	DESCRIPTION	CONTENTS OVERVIEW PER SECTION
CD-ROM Home Page	The purpose of The Healthy Newborn.	
Contents Index	Overview of contents.	
The Healthy Newborn Manual	The electronic version of this manual with hyperlinks to key references.	
Promoting Quality Maternal and Newborn Care	The electronic version of a CARE manual for maternal health programming prepared by Susan Rae Ross.	
Health Management Information for Newborn Health	Additonal tools and infromation are available in documents listed under the headings of Part II of the manual.	
Step-by-Step Programming for Newborn Health	Additional tools and infromation are available in documents listed under principles and then the four steps of the step-by-step approach to programming.	
Interventions for Newborn Health and Lessons Learned	Relevant documents will be listed under the various packages of interventions.	
Other Weblinks for Newborn Health	Useful websites including more information and details on funding possibilities.	
CCHI, CARE, CDC	Links to the websites of CCHI, CARE, and CDC.	

APPENDIX

Pages for Photocopying

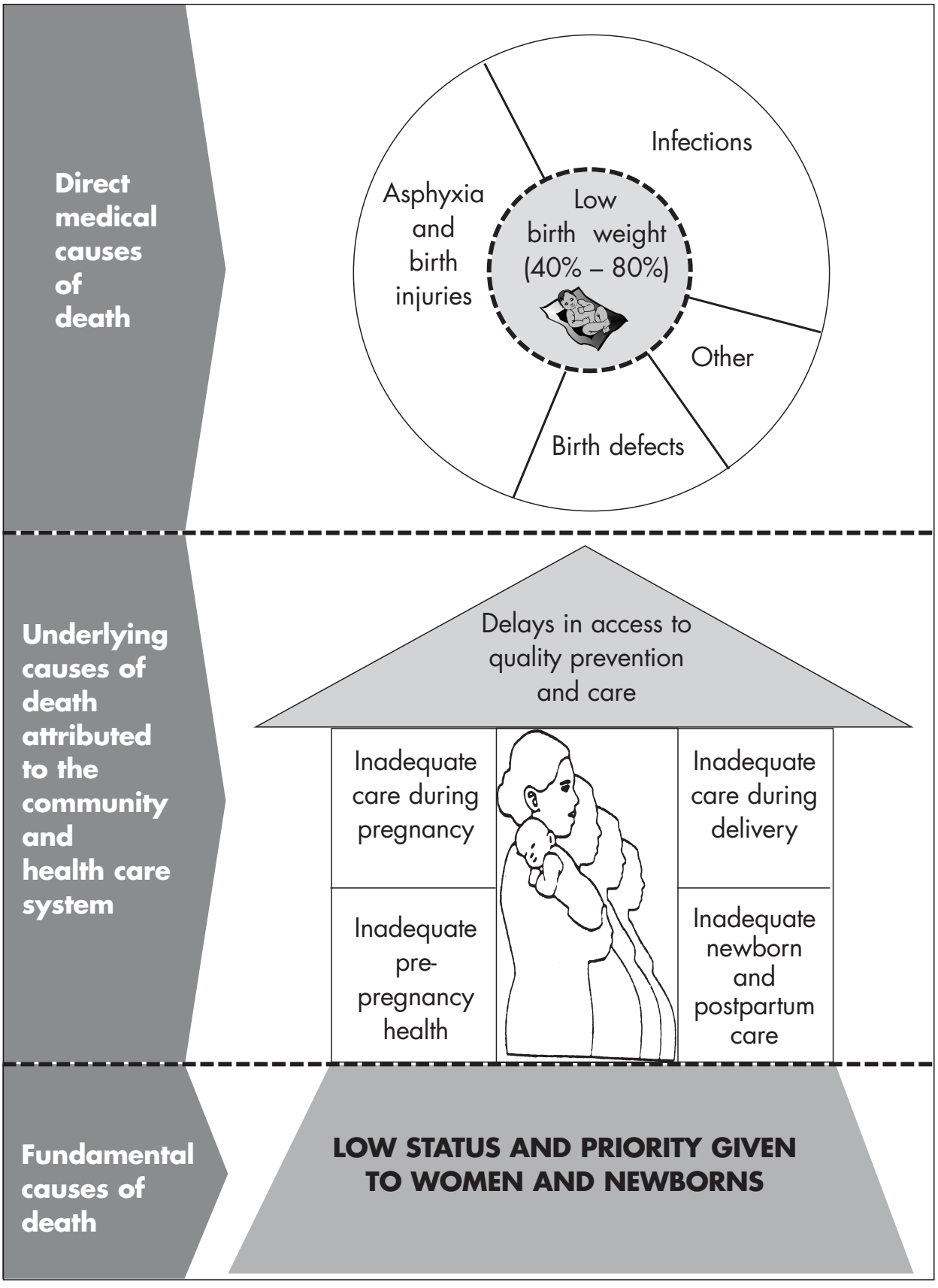
The following of the Appendix are inserted for your use to tear-out of the book and photocopy.

FIGURE 1.3
INTERVENTION PACKAGE FOR TIME PERIODS OF PREGNANCY, NEONATAL, AND INFANT LIFE



Stillbirths = Babies born dead after 22 weeks of gestation (birth weight more than 500 g)
[Note: WHO recommends international reporting of fetal deaths only for those more than 28 weeks/(1 kg)]

FIGURE 1.8
CONCEPTUAL FRAMEWORK FOR CAUSATION OF FETAL-NEONATAL DEATHS

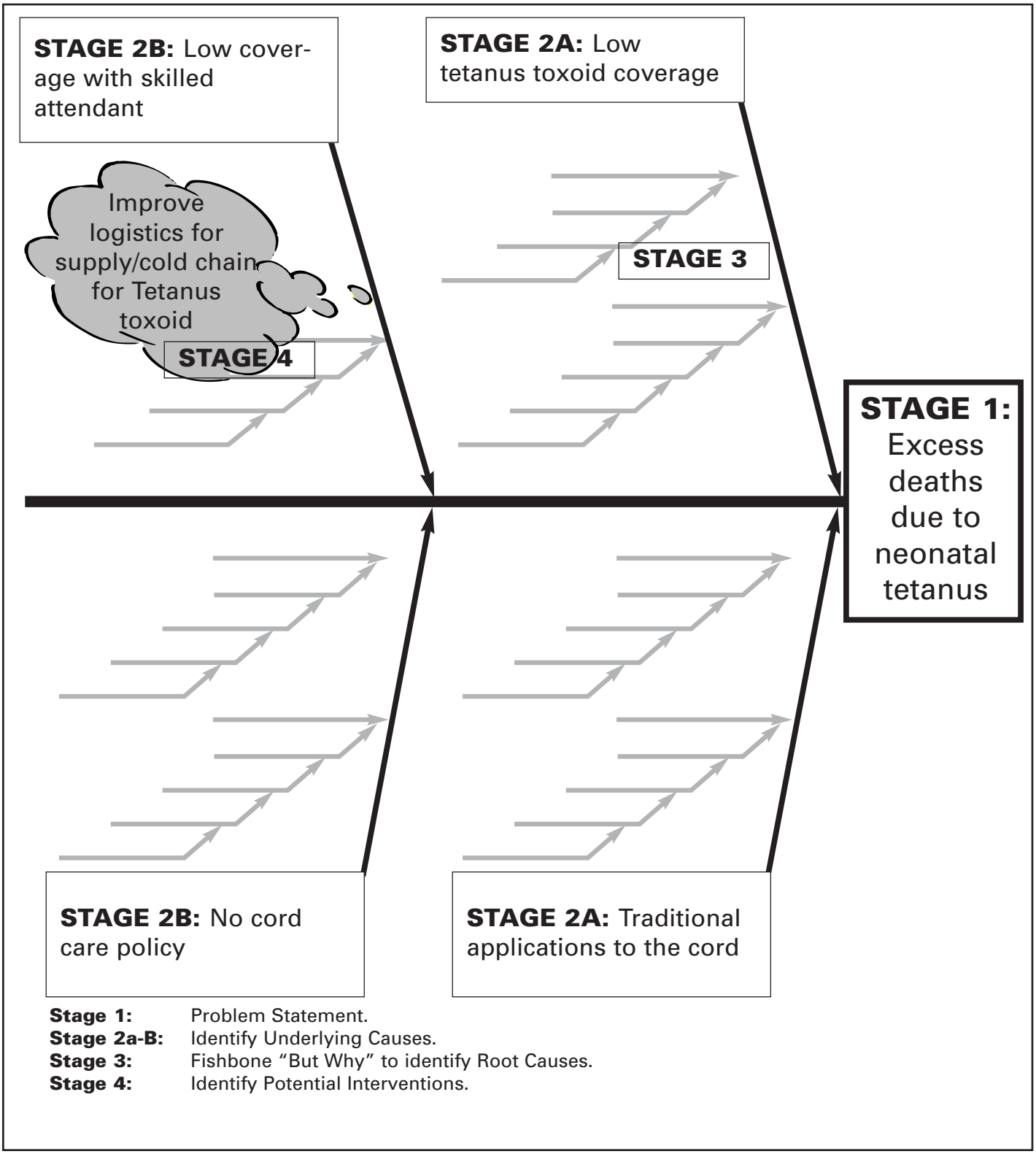


Source: Lawn 2000

TABLE 2.11
BABIES: AN EXAMPLE USING RAW NUMBERS

BIRTH WEIGHT GROUPS	DURING PREGNANCY	DURING DELIVERY	PRE-DISCHARGE	POST - DISCHARGE
<1,500 g	*Cell 1*	*Cell 2*	*Cell 3*	*Cell 4*
1,500-2,499 g	*Cell 5*	*Cell 6*	*Cell 7*	*Cell 8*
>2,500 g	*Cell 9*	*Cell 10*	*Cell 11*	*Cell 12*

FIGURE 3.2
THE FISHBONE DIAGRAM USED TO UNDERSTAND THE ROOT CAUSE OF NEONATAL TETANUS



Stage 1: Problem Statement.
Stage 2a-B: Identify Underlying Causes.
Stage 3: Fishbone "But Why" to identify Root Causes.
Stage 4: Identify Potential Interventions.

FIGURE 3.10
HEALTH COUNTERMEASURE MATRIX

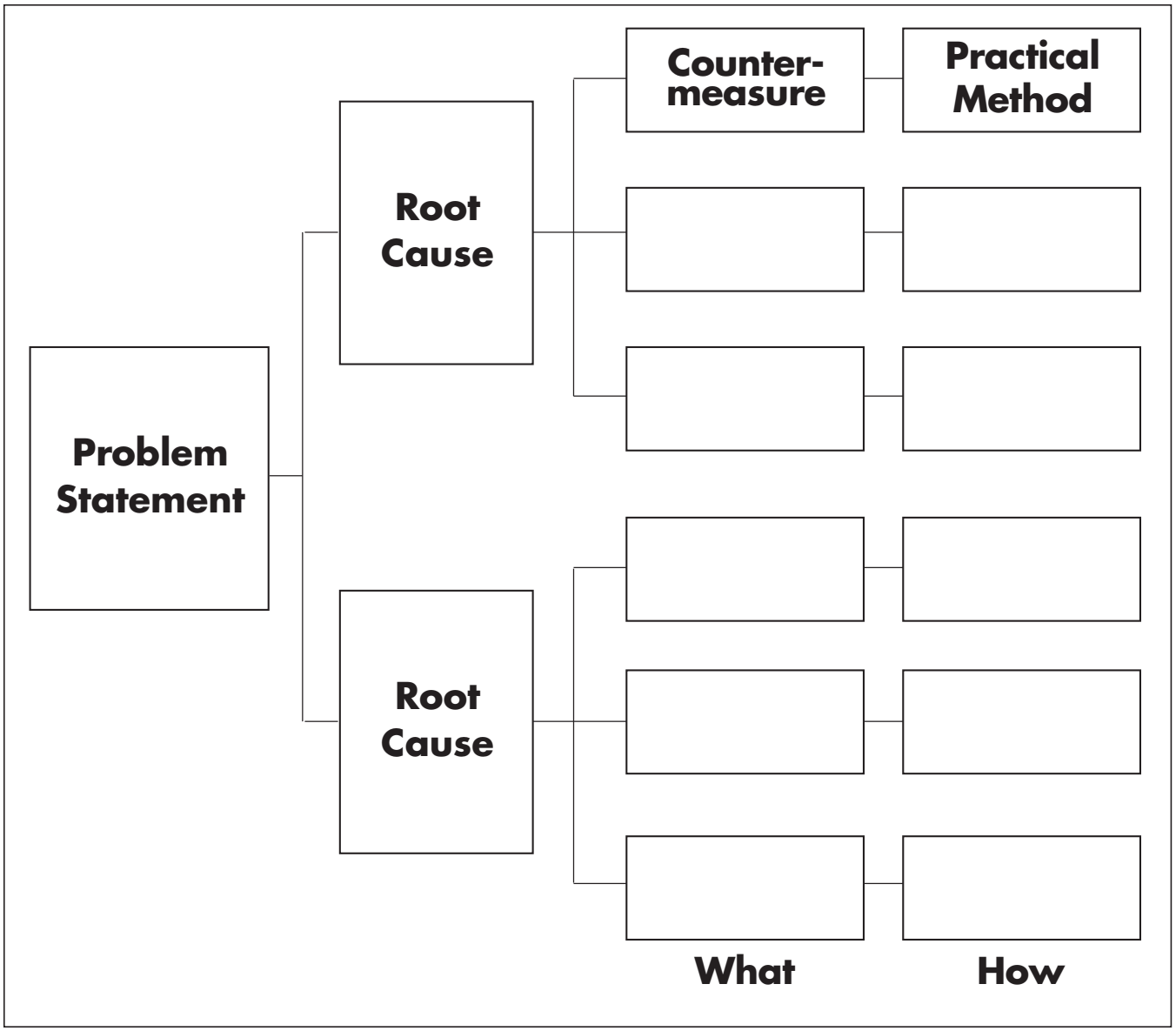


FIGURE 4.3
SPIDER WEB OF INTERVENTION PACKAGES BY TIME PERIOD

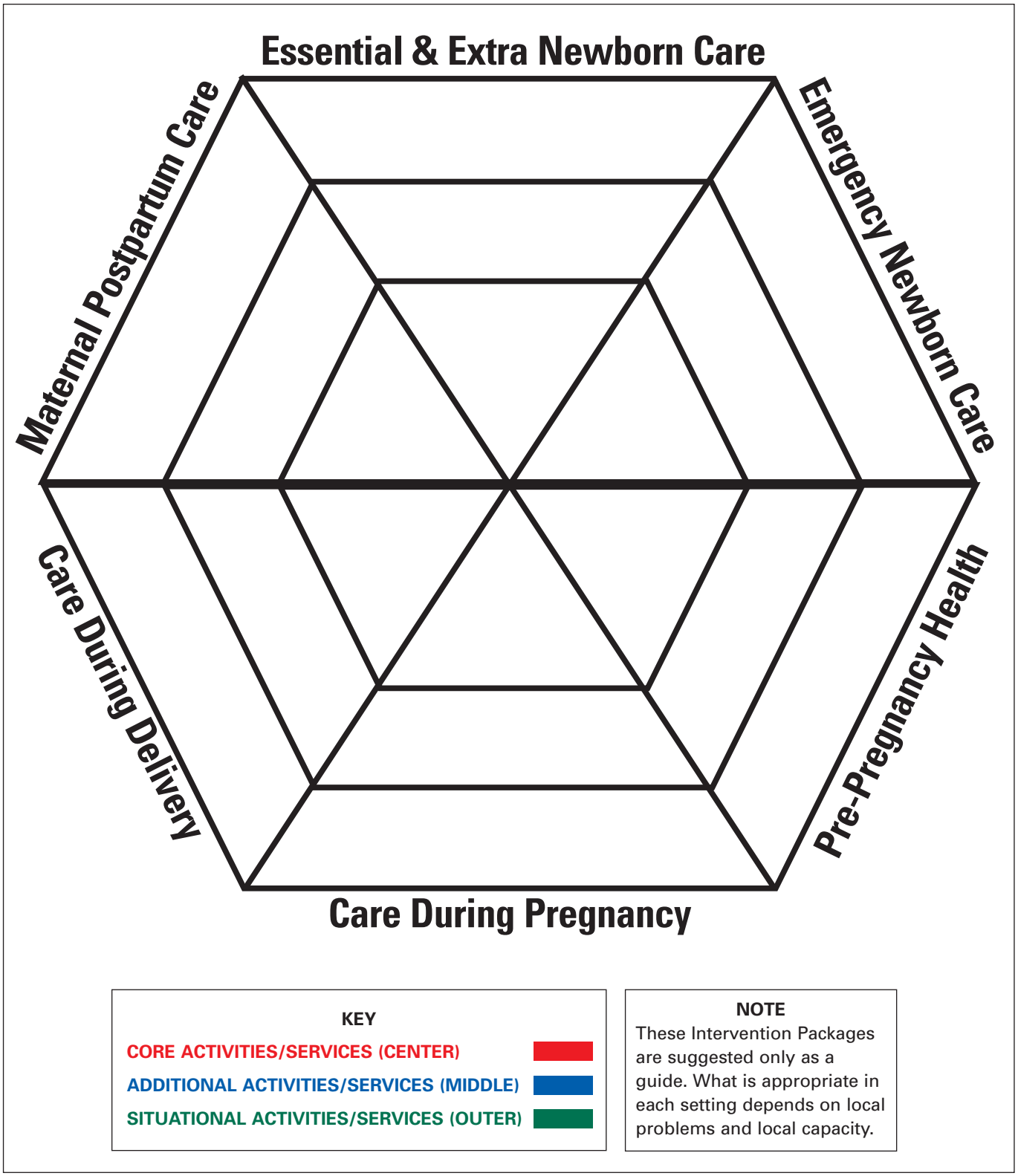
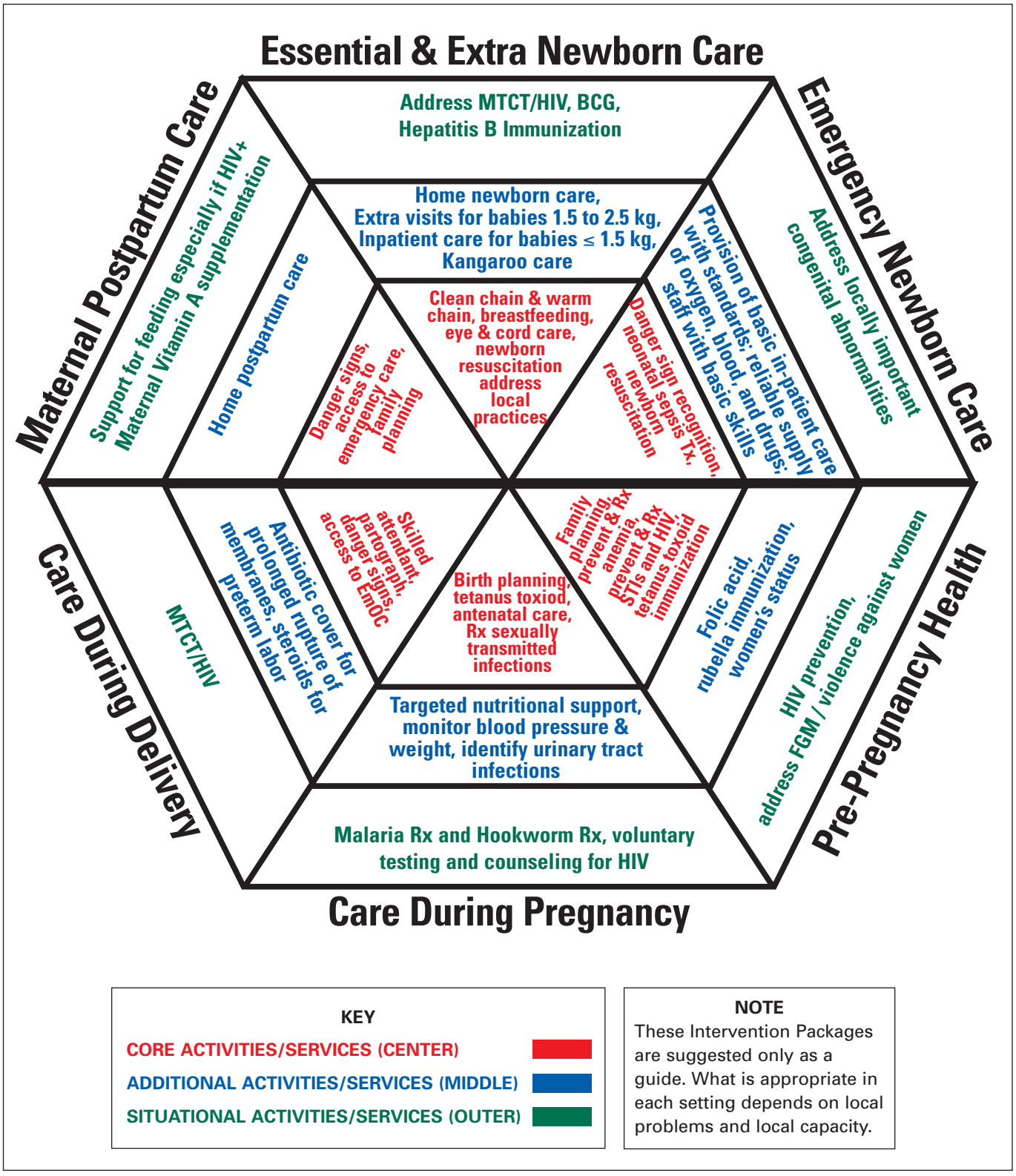


FIGURE 4.3
SPIDER WEB OF INTERVENTION PACKAGES BY TIME PERIOD



KEY

CORE ACTIVITIES/SERVICES (CENTER)

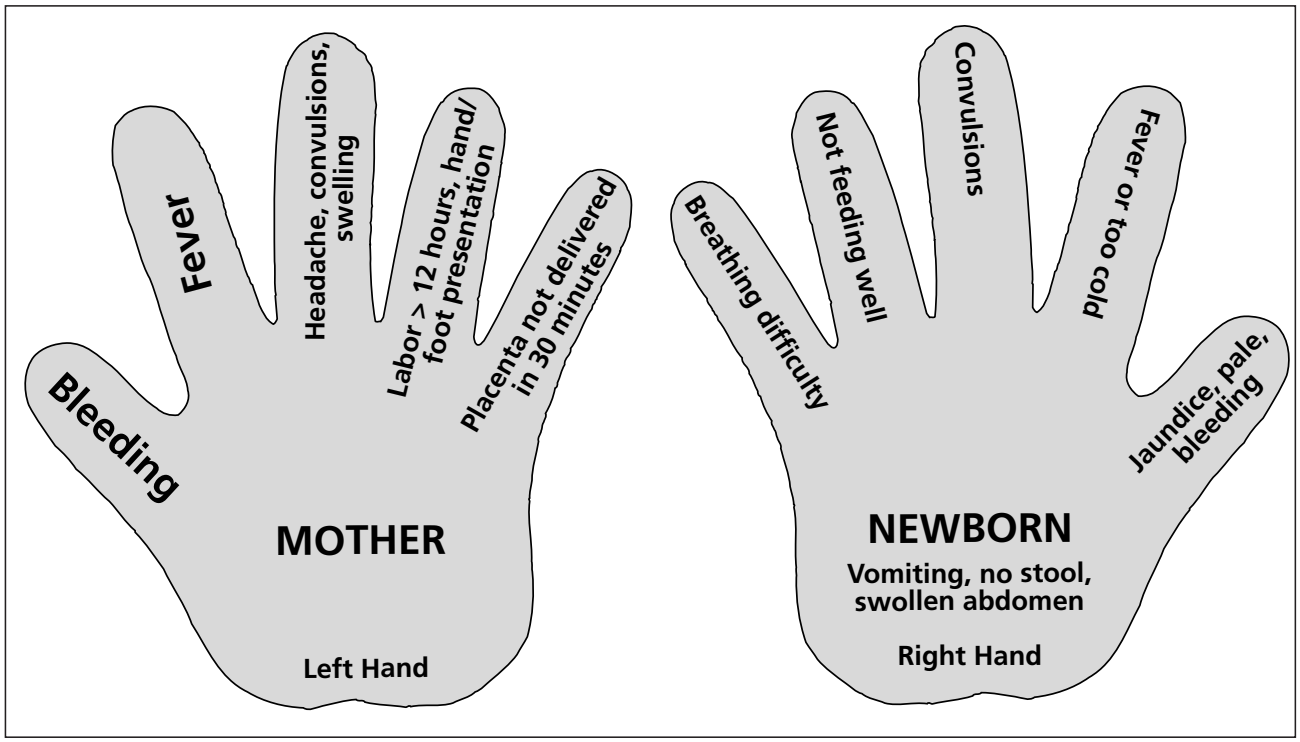
ADDITIONAL ACTIVITIES/SERVICES (MIDDLE)

SITUATIONAL ACTIVITIES/SERVICES (OUTER)

NOTE

These Intervention Packages are suggested only as a guide. What is appropriate in each setting depends on local problems and local capacity.

FIGURE 4.2
DANGER SIGNS FOR THE MOTHER AND THE NEWBORN THROUGHOUT PREGNANCY, CHILDBIRTH, POSTPARTUM, AND THE NEWBORN PERIODS.



Source: Based on danger signs in WHO/RHR/00.7.[7]. Adapted from Bartlett et al[5].